



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,252	09/29/2003	Donald May	87838.0007	1606
33135	7590	07/15/2004	EXAMINER	
STEPTOE & JOHNSON LLP 201 EAST WASHINGTON STREET SUITE 1600 PHOENIX, AZ 85004			SALDANO, LISA M	
			ART UNIT	PAPER NUMBER
			3673	

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/674,252

Applicant(s)

MAY, DONALD

Examiner

Lisa M. Saldano

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/29/2003.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: The specification uses the same element number to label different aspects of the invention. For example, on page 11, the element number 6 is used to describe a "pier shaft 6" (see line 5), "Pier 6" (see line 17) and helix 6 (see line 21). Also, on page 21, both element numbers 15 and 16 are used to describe the screw jack platform. Please review the specification and correct instances of this issue as necessary.

Appropriate correction is required.

Claim Objections

2. Claims 7, 11 and 17 are objected to because of the following informalities:

Regarding claim 7, line 3, the applicant appears to have misspelled the word bearing.

Regarding claim 11, the applicant appears to have mistakenly omitted a claim numbered 11 from the list of claims.

Regarding claim 17, the applicant recites claims directed to "a pin." It appears that the antecedent basis provided in the specification for this aspect of the of invention uses the term "bolt." Please correct as necessary.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 14-16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (5,800,094).

Regarding claims 1, 2, 14 and 19, Jones discloses an apparatus for lifting and supporting structures comprising a pier shaft 30, a helix 32 fixed to the bottom of the pier shaft, a pier cap stabilizer assembly including support and lifting assemblies 50, 60 mounted on the pier shaft, a shelf assembly 8,9,15,16, mounted to the pier cap stabilizer and a screw jack 6,7 positioned on the shelf. Jones also discloses a screw jack comprising a jack platform 60 and a jack screw 6,7; a vertical stabilizer 11 mounted on the top of the pier shaft and a shelf structure 50, 60 which is mounted to the vertical stabilizer and pier shaft and a clamp comprises support bracket 4 and bolts 2 mounting a top portion of the vertical stabilizer.

Although Jones fails to explicitly disclose a method for installing a pier, it would have been obvious to one of ordinary skill in the art to derive a method for installing a pier from Jones' disclosure because Jones' disclosure provides the basic steps required to develop a process such as the one claimed by the applicant of the present invention. Specifically, Jones discloses screwing or driving a helical pier into the ground to a desired depth beneath a footer or

foundation of a building 13. Jones discloses that types of piers other than helical types may be used (see column 4, lines 57-65). Jones then discloses placement of a support assembly, which functions as a pier cap stabilizer shaft, over an upper end 30 of a pier 32. The support assembly includes a shelf structure 50, 60. The support assembly is slid and may be rotated as well, which is a normal aspect of sliding an object on another object, on the pier 32 to place the shelf below the bottom surface of the footer (see Fig. 1). Screw jacks 6, 7 are positioned on the shelf up against the bottom surface of the footer 13 (see Fig. 1).

Furthermore, regarding claims 15 and 16, it would have been obvious to one of ordinary skill in the art at the time of the invention to drive the pier either vertically or horizontally, to some degree, as desired because doing so would not prohibit the shelving and jack portions of the invention from contacting the foundation or footer 13 for raising.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones, as applied to claim 2 above, and further in view of Rippe (4,708,528).

Jones discloses an apparatus for lifting and supporting structures, as described above, wherein Jones discloses that types of piers other than helical types may be used (see column 4, lines 57-65).

However, Jones fails to explicitly disclose a straight pier and end caps.

Rippe discloses a process and apparatus for stabilizing structures comprising a straight pier 12 with a cap 18 mounted at its bottom (see Fig. 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Jones to use a straight pier with an end cap, as taught by Rippe

because Jones clearly discloses that other types of piers may be used. Furthermore, using a straight pier requires less excavation and disruption of the earth around the foundation and less disruption of the foundation itself during execution of the stabilizing process.

6. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones, as applied to claims 1 and 14 above, and further in view of West et al (5,246,311).

Jones discloses an apparatus for lifting and supporting structures, as described above. Specifically, Jones discloses a tube 11 attached to the shelf assembly wherein the tube is placed over the shaft 30 of the pier 32 and under the footer 13.

However, Jones fails to explicitly disclose inserting a pin through the shaft and tube.

West et al disclose a foundation repairing system comprising a pier 9, a pier guide 23 in the form of a tube wherein a pin or bolt 127 is inserted through the tubular guide 23 and pier shaft 9 to secure the guide to the pier shaft.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a bolt or pin, as taught by West et al, to secure portions of the pier shaft and the entire support assembly of Jones, because it provides a means to enhance the attachment various portions of the invention to one another. Furthermore, it provides a means to secure the pier shaft to the support assembly including the shelf, thereby enhancing reliability that operations will not be stopped by disengaged connections.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones, as applied to claim 1 above, and further in view of May (4,854,782).

Jones discloses an apparatus for lifting and supporting structures, as described above. Specifically, Jones a shelf assembly 8,9,15,16, mounted to the pier cap stabilizer and a screw jack 6,7 positioned on the shelf. Jones also discloses hydraulic jacks (see Fig.5, lines 20-30).

However, Jones fails to explicitly disclose hydraulic rams.

May discloses an apparatus for lifting structures comprising a lift bracket attached to a shoe and a hydraulic ram or jack (see abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Jones to use a hydraulic ram, as taught by May, because hydraulic rams and hydraulic jacks are uses interchangeably as disclosed by may because that function equivalently.

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones, as applied to claim 14 above, and further in view of Freeman,III (5,336,021).

Jones discloses an apparatus for lifting and supporting structures, as described above. Specifically, Jones a shelf assembly 8,9,15,16, mounted to the pier cap stabilizer and a screw jack 6,7 positioned on the shelf.

However, Jones fails to explicitly disclose jack sleeves with fitting rods.

Freeman,III disclose a system for underpinning a building comprising bracket sleeves and a rod wherein the rod fits into the sleeve.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Jones to provide sleeves and rods, as taught by Freeman, III, for any

Art Unit: 3673

items desired to be coupled to one another, such as the screw jack and the shelf. This is a commonly used method for connecting or coupling items to one another.

Allowable Subject Matter

9. Claim 7-13 would be allowed over the prior art of record.

10. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 7, the closest prior art of record, Jones as described above, fails to disclose a method for installing a pier on a building comprising the steps of placing a shelf on a pier such that the shelf extends above and away from a footer in combination with adjustably extending a screw jack assembly between a top surface of the shelf and a bottom surface of the footer in combinations with the remainder of the limitations presented by the applicant in claim

7.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa M. Saldano whose telephone number is 703-605-1167. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on 703-308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lms



HEATHER SHACKELFORD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600